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**APPARATUS AND PROCESS FOR THE PREPARATION
OF LOW-IRON SINGLE CRYSTAL SILICON SUBSTANTIALLY
FREE OF AGGLOMERATED INTRINSIC POINT DEFECTS**

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus for producing silicon single crystals with reduced iron contamination is disclosed. The apparatus contains at least one structural component constructed of a graphite substrate and a silicon carbide protective layer covering the surface of the substrate 10 that is exposed to the atmosphere of the growth chamber. The graphite substrate has a concentration of iron no greater than about 1.5×10^{12} atoms/cm³ and the silicon carbide protective layer has a concentration of iron no greater than about 1.0×10^{12} atoms/cm³.

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